

## ABSTRACT

### PROTECTION SWITCHING AND MONITORING METHOD AND ARRANGEMENT IN A DATA TRANSMISSION SYSTEM

Protection switching in a single switching device is done on both the multiplex level and the path level. The performance of a working path signal and a protection path signal in a network element is monitored in separate performance monitoring devices. The monitoring device allocated to the selected path signal is activated while the other one is deactivated. The determined performance values of both monitoring devices are added up at the end of a certain monitoring period and a resulting monitoring result corresponding to the monitoring result of the selected path signal is determined. The path signals are alarm-monitored by corresponding alarm-monitoring devices.